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Expert: Test homes, not kids, for lead
No 'safe level' for lead exists, physician says
By Wally Kennedy
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Today's approach to the prevention of lead poisoning in children is to screen them for lead exposure via blood samples.

If lead is found in the children's blood, steps are taken to reduce the exposure to environmental sources of lead — in paint, soil or dust.

But a physician speaking on the subject said Thursday that a better approach would be to screen the houses in which the children live for lead.

If lead is found in a house, steps would be taken to remove it and prevent the child from being exposed to the heavy metal.

That approach to prevention was advocated by Dr. Bruce Lanphear, an associate professor of pediatrics and environmental health at Children's Hospital Medical Center at the University of Cincinnati.

Lanphear presented some of the latest findings on lead exposure involving children to a small group of public-health officials during a seminar at St. John's Regional Medical Center.

He was invited to the area by Susan Waldron, a specialist with the Ottawa County (Okla.) Health Department. He was to speak Thursday night to a group in Miami, Okla.

Lanphear said that when blood samples are taken from children, they are being used as biological indicators for substandard housing. He said the objective should be to prevent childhood lead exposure by screening houses for lead.

Lanphear's research and that of other experts in the field is questioning whether there is a safe level for lead.

"There is no safe level for lead," he said. "We have documented adverse effects below 10 micrograms per deciliter of blood.

"A small amount of lead can cause a significant decrease in reading ability in children,"

Under a guideline issued by the federal Centers for Disease Control in 1991, the level for concern is 10 micrograms of lead per deciliter of blood. At the time that action level was set, the CDC said it was an arbitrary number based on a number of considerations.

The research now indicates that a much lower level of lead exposure can cause cognitive disabilities in children, Lanphear said.

The so-called "safe" level for lead exposure in the 1960s was 60 micrograms per deciliter. That number has gone down in steps since then to reflect new data that show even small levels of lead exposure can be harmful.

"There may not be a threshold for damage to occur," Lanphear said. "That's why it is so important to prevent children from ever being exposed to lead because once it has happened, it's too late."

A number of studies between 1981 and 1992 showed that an exposure level between 10 and 20 micrograms per deciliter can cause a loss in IQ ranging from 1.3 points to 5.8 points. An average IQ is 100 points.

Lanphear said research also is suggesting that lead exposure can be linked to aggression in children and delinquency in adolescents. Some experts think there might be a connection between attention deficit disorders and lead in the environment, though research has not conclusively linked the two.

Across the nation, the number of children with elevated blood-lead levels has decreased by 90 percent in the past 25 years or so. That is because lead-based paint was banned in 1978 and because leaded gasoline was phased out in the late 1970s.

Even with those gains, children today are exposed to far higher levels of lead than children of the past. An analysis of bones from pre-Industrial Age people shows far lower levels of lead when compared with bone tests on modern people.

Because lead was used in fuel and in house paint, it has become a part of the environment that will not go away.

Research at Midvale, Utah, where a lead smelter and mill once operated, has shown that a soil removal project there has been effective in reducing lead exposure in children younger than 3.

The hand-to-mouth behavior of children at the age, Lanphear said, made the cleanup effective for that age group, but less effective for older children.

Recently, the U.S. Environmental Protection Agency funded a $28 million project in Joplin that removed lead-contaminated soil from 2,495 yards and playgrounds.

Other soil removal projects have been conducted in Southeast Kansas and Northeast Oklahoma.

Lanphear said hand washing, house cleaning and dust control continue to be the most important steps that parents can take to reduce childhood lead exposure.